Application No. 10/580,270 Amendment dated June 17, 2009 Reply to Office Action of January 27, 2009

## **REMARKS**

Claims 1, 3, 5, 10, 13, 21-33 are present in this application. Claims 1 and 21 are independent claims. Claims 24-33 are new.

#### **Statement of Interview**

Applicant thanks the Examiner for conducting the interview of April 30, 2009. Applicant agrees with the Examiner's statement that the "capacitance" feature was discussed during the interview, and that aspects of the "capacitance" feature may be patentable over the cited prior art. Applicant has taken the discussion during the interview into account in preparing the present amended claims.

### § 103(a) Rejection – Ueda, Ono

Claims 1-3, 11-13, 19, and 21-23 have been rejected under 35 U.S.C §103(a) over U.S. Patent No. 7,269,440 (Ueda) in view of U.S. Patent Publication No. 2001/0044320 (Ono). (Note that the statement of rejection does not formally include claims 21-23). Claims 1 and 21 have been amended. Applicant respectfully traverses this rejection based on the claims as amended.

Embodiments of the present invention include a wireless unit, for example a foldable cellular phone as shown in Fig. 3. The wireless unit includes, among other things, a first casing containing a first circuit member and a second casing containing a second circuit member. A first connecting conductor is connected to the first circuit member and a second connecting conductor is connected to the second circuit member. A plane of the first connecting conductor and a plane of the second connecting conductor oppose each other with the insulator or air therebetween and are disposed at a certain interval.

In other words, the first circuit member and the second circuit member are electrically connected to each other through a capacitance coupling. These features are recited in claims 1 and 21. Providing a capacitance coupling between the first circuit member and the second circuit member enables, among other things, adjustment of an effective casing length to an appropriate value and prevention of drop in antenna efficiency (specification at page 5, ll. 1-5). Adjustment

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can be accomplished by placing the connecting conductors at an interval (specification at page 8, first paragraph) or by including an insulator between opposing surfaces of the connecting conductors (specification at page 8, second paragraph).

During the interview, the Examiner had indicated that end faces of 271 and 264 shown in Fig. 7 of Ono share a plane, and thus can be considered as being planes that oppose each other.

In order to clarify the intended claimed structure, claim 1 has been amended to recite that the second connecting conductor is

"capable of being electrically connected to said first connecting conductor through an insulator or air, wherein one plane A of said first connecting conductor and one plane B of said second connecting conductor oppose each other with the insulator or air therebetween such that the plane A and the plane B are disposed at a certain interval."

Similarly, claim 21 has been amended to recite that the first connecting conductor and the second connecting conductor

"oppose each other such that the plane A and the plane B are disposed at a certain interval, and capacitance is formed by said one plane A and said one plane B."

Applicant submits that end faces of 271 and 264 shown in Fig. 7 of Ono do not oppose each other with an insulator or air therebetween (claim 1), or such that a capacitance is formed (claim 21).

Applicant submits that Ueda and Ono, either alone or in combination, fail to disclose at least the claimed features as amended. Applicant requests that the rejection be reconsidered and withdrawn.

### § 103 Rejection – Ueda, Ono, Desclos

Claims 4-8, 10 and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Ueda in view Ono and further in view of U.S. Patent No. 7,310,536 (Desclos). Applicant respectfully traverses this rejection.

Claims 5 and 10 remain pending. Applicant submits that at least for their dependency on claim 1, dependent claims 5 and 10 are patentable over Ueda, Ono and Desclos for the reasons above for claim 1.

Applicant requests that the rejection be reconsidered and withdrawn.

# **New Claims**

Claims 24 to 33 have been added.

Claim 24 recites a further feature of the ring-shaped connecting conductors of claim 5.

Claim 25 recites that the opposing area recited in claim 1 varies with rotation of the first casing relative to the second casing. In Desclos, rotating of casings does not lead to a change in an opposing area of connecting conductors.

Claim 26 relates to the features of claim 25, as well as that the distance between planes is kept constant during rotation of casings. This claimed feature leads to a continuous change in capacitance.

Claim 27 covers an arrangement as shown for example in Fig. 3.

Claim 28 covers an arrangement as shown for example in Fig. 16.

Claim 29 covers an arrangement as shown for example in Fig. 11B.

Claim 30 depends from claim 1 and further recites a "third connecting conductor" and a "fourth connecting conductor," which similar to the "first connecting conductor" and "second connecting conductor," are electrically connected "through the insulator or air, wherein one plane C of the third connecting conductor and one plane D of the fourth connecting conductor

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oppose each other with the insulator or air therebetween such that the plane C and the plane D

are disposed with a certain interval."

Applicant submits that unlike the claimed invention, Ueda discloses only one connecting

part. Furthermore, as mentioned above, by adjusting the insulator or air over the certain interval

the electrical length of the casing can be changed. Applicant submits that Ueda discloses an

arrangement that would require a change in the electrical length of the casing, if it were to

address a problem solved in the present invention.

Claim 31 recites the added element of a "connecting substrate" (e.g., flexible substrate

17) connecting the first and second circuit member in addition to the connections provided by the

connecting conductors.

The claimed arrangement enables a high frequency current flow for the antenna, and

provides that the effect of the high frequency current flow is decreased with the connecting

substrate located between the capacitive couplings.

Claims 32 and 33 recite features related to a variation, as shown in present Figs. 7A and

7B.

Applicant submits that the new claims are patentable at least for the reasons above for

claim 1.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in

condition for allowance.

Should there be any outstanding matters that need to be resolved in the present

application, the Examiner is respectfully requested to contact Robert Downs Reg. No. 48,222 at

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the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: June 17, 2009

Respectfully submitted,

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